

AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A method for N/M downscaling of digital image data, comprising the steps of:

providing a sequence of image data, the sequence corresponding to one dimension of a rectangular array of image data and having R pixels; and

sampling the image data so that, for every N pixels of said sequence, (N-M)+/-1 pixels of the image data are sampled, where R, M, and N are integers, N<R and M<N.

2. (Currently amended) The method of claim 1, further comprising displaying the sampled ~~said~~ image data on a display device.

3. (Original) The method of claim 2, further comprising creating a count sequence corresponding to said sequence of image data, determining whether an instance of said count sequence is less than N, and if true, selecting a corresponding instance of image data.

4. (Currently amended) The method of claim 1, further comprising creating a count sequence corresponding to said sequence of image data in which said count sequence is incremented in steps of N-M, determining whether an instance of said count sequence is less than N, and if true, selecting a corresponding instance of image data. ~~3, wherein $N=2^n$, where n is a positive integer, and wherein said step of sampling samples (N-M) of said pixels for every N pixels of said sequence.~~

5. (Currently amended) The method of claim 1, further comprising creating a count sequence corresponding to said sequence of image data, determining whether a particular count ~~an instance~~ of said count sequence is less than N, and if true, selecting a corresponding instance of image data.

6. (Currently amended) The method of claim 5, wherein $N=2^n$, ~~where~~ n is a positive integer, and ~~wherein~~ said step of sampling samples (N-M) of said pixels for every N pixels of said sequence.

7. (Original) The method of claim 6, further comprising beginning said count sequence at an offset K.

8. (Currently amended) The method of claim 2, wherein $N=2^n$, where n is a positive integer, and wherein said step of sampling samples (N-M) of said pixels for every N pixels of said sequence.

9. (Currently amended) The method of claim 1, wherein $N=2^n$, where n is a positive integer, and wherein said step of sampling samples (N-M) of said pixels for every N pixels of said sequence.

10. (Currently amended) The method of claim 4, wherein M is greater than 1, ~~and further comprising transmitting the sampled said image data.~~

11. (Currently amended) The method of claim 1, further comprising creating two or more count sequences, each count sequence corresponding to said sequence of image data, wherein a first count sequence counts to a first count value N_1 and a second count sequence counts to a second count value N_2 , and wherein when one of said two or more count sequences counts to its respective count value, a corresponding instance of image data is not sampled. ~~further comprising storing the sampled said image data in a memory.~~

12. (Currently amended) An apparatus for N/M downscaling of digital image data, comprising a sampling circuit, ~~for sampling to sample~~ a sequence of image data, the sequence corresponding to one dimension of a rectangular array of image data and having R pixels, so that wherein (N-M)+/-1 pixels of the image data are sampled for every N pixels of said sequence, where R, M, and N are integers, $N < R$ and $M < N$.

13. (Currently amended) The apparatus of claim 12, further comprising a graphics display device to display ~~for displaying~~ the sampled said image data.

14. (Currently amended) The apparatus of claim 13, further comprising an adding circuit to create ~~for creating~~ a count sequence corresponding to said sequence of image data, wherein said sampling circuit determines ~~is adapted for determining~~ whether an instance of said count sequence is less than N, and if true, selects ~~selecting~~ a corresponding instance of image data.

15. (Currently amended) The apparatus of claim 14, wherein said adding circuit includes an n-bit adder, where $N=2^n$, n is a positive integer, and wherein said sampling circuit samples ~~is adapted to sample~~ (N-M) of said pixels for every N pixels of said sequence.

16. (Currently amended) The apparatus of claim 15, wherein said n-bit adder counts in increments of N-M. ~~15, wherein said graphics display device includes one or more LCD panels.~~

17. (Currently amended) The apparatus of claim 12, further comprising an adding circuit to create ~~for creating~~ a count sequence corresponding to said sequence of image data, wherein said sampling circuit determines ~~is adapted for determining~~ whether a particular count ~~an instance~~ of said count sequence is less than N, and if true, selects ~~selecting~~ a corresponding instance of image data.

18. (Currently amended) The apparatus of claim 17, wherein said adding circuit includes an n-bit adder, where $N=2^n$, n is a positive integer, and wherein said sampling circuit samples ~~is adapted to sample~~ (N-M) of said pixels for every N pixels of said sequence.

19. (Currently amended) The apparatus of claim 18, wherein said adding circuit begins ~~is further adapted to begin~~ said count sequence at an offset K.

20. (Currently amended) The apparatus of claim 18, wherein said n-bit adder counts in increments of N-M. ~~13, wherein said adding circuit includes an n-bit adder, where $N=2^n$ and n is a positive integer, and wherein said sampling circuit is adapted to sample (N-M) of said pixels for every N pixels of said sequence.~~

21. (Currently amended) The apparatus of claim 12, wherein said adding circuit includes an n-bit adder, where $N=2^n$, n is a positive integer, and wherein said sampling circuit samples ~~is adapted to sample~~ (N-M) of said pixels for every N pixels of said sequence.

22. (Currently amended) The apparatus of claim 21, wherein said n-bit adder counts in increments of N-M. ~~12, further comprising a graphics display device for displaying/transmitting the sampled said image data.~~

23. (Currently amended) The apparatus of claim 12, further comprising at least two adding circuits, each adding circuit to create a count sequence corresponding to said sequence of image data, wherein a first count sequence counts to a first count value N_1 and a second count sequence counts to a second count value N_2 , and wherein when one of said first and second count sequences counts to its respective count value, a corresponding instance of image data is not sampled. ~~—a graphics display device for storing the sampled said image data in a memory.~~

24. (Currently amended) A medium readable by a machine embodying a program of instructions executable by the machine to perform a method for M/N down-scaling of digital image data, comprising the steps of:

providing a sequence of image data, the sequence corresponding to one dimension of a rectangular array of image data and having R pixels; and

sampling the image data so that $(N-M)+/-1$ pixels of the image data are sampled for every N pixels of said sequence, where R , M , and N are integers, $N < R$ and $M < N$.

25. (Currently amended) The medium of claim 24, wherein the method further comprises displaying the sampled ~~said~~ image data on the display.

26. (Original) The medium of claim 25, wherein the method further comprises creating a count sequence corresponding to said sequence of image data, determining whether an instance of said count sequence is less than N, and if true, selecting a corresponding instance of image data.

27. (Currently amended) The medium method of claim 24, further comprising creating a count sequence corresponding to said sequence of image data in which said count sequence is incremented in steps of N-M, determining whether a particular count of said count sequence is less than N, and if true, selecting a corresponding instance of image data. ~~3, wherein $N=2^n$, where n is a positive integer, and wherein said step of sampling samples $(N-M)$ of said pixels for every N pixels of said sequence.~~

28. (Original) The medium of claim 24, creating a count sequence corresponding to said sequence of image data, determining whether an instance of said count

sequence is less than N , and if true, selecting a corresponding instance of image data.

29. (Currently amended) The medium of claim 28, wherein $N=2^n$, where n is a positive integer, and ~~wherein~~ said step of sampling samples $N-M$ of said pixels for every N pixels of said sequence.

30. (Original) The medium of claim 29, further comprising beginning said count sequence at an offset K .

31. (Currently amended) The medium of claim 25, wherein $N=2^n$, where n is a positive integer, and ~~wherein~~ said step of sampling samples $N-M$ of said pixels for every N pixels of said sequence.

32. (Currently amended) The medium of claim 24, wherein $N=2^n$, where n is a positive integer, and ~~wherein~~ said step of sampling samples $N-M$ of said pixels for every N pixels of said sequence.

33. (Currently amended) The medium of claim 27, wherein M is greater than 1.
~~24, further comprising transmitting the sampled said image data.~~

34. (Currently amended) The medium of claim 24, further comprising creating two or more count sequences, each count sequence corresponding to said sequence of image data, wherein a first count sequence counts to a first count value N_1 and a second count sequence counts to a second count value N_2 , and wherein when one of said two or more count sequences counts to its respective count value, a corresponding instance of image data is not sampled. ~~further comprising storing the sampled said image data in a memory.~~

35. (Currently amended) A system for displaying images, comprising:

a camera;

a host;

a graphics display device; and

a graphics controller that includes a sampling circuit to sample, ~~wherein said graphics controller comprises an apparatus for downscaling digital image data, said apparatus comprising a sampling circuit, for sampling a sequence of image data, the sequence corresponding to one dimension of a rectangular array of image~~

data and having R pixels, so that wherein (N-M)+/-1 pixels of the image data are sampled for every N pixels of said sequence; where R, M, and N are integers, N<R and M<N.

36. (Currently amended) The system of claim 35, wherein said graphics display device comprises an embedded memory to store ~~for storing~~ the sampled ~~said~~ image data.

37. (Currently amended) The system of claim ~~35~~36, wherein said sampling circuit apparatus for downscaling further comprises an adding circuit to create for creating a count sequence corresponding to said sequence of image data, wherein said sampling circuit is adapted to determine ~~for determining~~ whether a particular count ~~an instance~~ of said count sequence is less than N, and if true, to select ~~selecting~~ a corresponding instance of image data.

38. (Currently amended) The system of claim 37, wherein said adding circuit includes an n-bit adder, ~~where~~ $N=2^n$, n is a positive integer, and ~~wherein~~ said sampling circuit samples ~~is adapted to sample~~ (N-M) of said pixels for every N pixels of said sequence.

39. (Currently amended) The system of claim 38, wherein said n-bit adder counts in increments of N-M. ~~wherein said graphics display device includes one or more LCD panels.~~

40. (Cancelled)

41. (Cancelled)

42. (Currently amended) The system of claim ~~37~~41, wherein said adding circuit begins ~~is further adapted to begin~~ said count sequence at an offset K.

43. (Cancelled)

44. (Cancelled)

45. (Currently amended) The system of claim 35, wherein said system transmits ~~is adapted for transmitting~~ the sampled ~~said~~ image data.

46. (Currently amended) The system of claim 35, further comprising a memory to store ~~wherein said system is adapted for storing~~ the sampled said image data in a memory.

47. (Cancelled)